IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

KEYSTONE AUTONICS, INC.,	§	
	§	
Plaintiff,	§	
	§	
v.	§	Civil Action No. 2:07-CV-61
	§	
SIRIUS SATELLITE RADIO, INC.,	§	JURY DEMANDED
XM SATELLITE RADIO HOLDINGS,	§	
INC. and XM SATELLITE RADIO, INC.,	§	
	§	
Defendants.	§	

PLAINTIFF KEYSTONE AUTONICS, INC.'S
OPENING CLAIM CONSTRUCTION BRIEF

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I. INTRODUCTION

Plaintiff Keystone Autonics, Inc. ("Keystone") filed the instant case accusing Defendants Sirius Satellite Radio Inc. and XM Satellite Radio, Inc. (collectively, "Sirius XM") of infringement of claims 1-31 of United States Patent No. 7,165,123[1] and claims 1-8, 10, and 12-15 of United States Patent No. 6,324,592 (the "Patents-In-Suit"). (Exs. 1 & 2). The '592 Patent is the parent of the '123 Patent. While the scope of the claims between the '123 Patent and '592 Patent differ, the Patents-In-Suit generally relate to a system for receiving broadcast wireless signals, such as global position system (GPS) or satellite radio signals, having a two-part architecture comprised of: (1) one or more units to receive a broadcast wireless signal with data for user desired functionality (such as GPS or satellite radio); and (2) a computer system that interfaces with the unit(s) to provide the desired functionality to the user, where access to the data received at a unit via the wireless signal is restricted using a unique identifier.

By relying on the plain and ordinary meaning of the claim terms and the specification of the patents, Keystone's claim constructions follow the mandates of *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005). Sirius XM's constructions, on the other hand, seek to rewrite the claim terms in dispute by not only importing limitations from the specification, but by further attempting to import limitations from the prosecution history, another patent, and, at times, from thin air. Keystone respectfully requests that the Court adopt its constructions detailed herein.

II. TECHNICAL BACKGROUND

The genesis of the inventions claimed in the '123 Patent and '592 Patent stems from the inventor's background in navigation and his knowledge of the state of mobile electronics at the time the applications were filed. George Hindman, the sole inventor of both Patents-In-Suit,

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[1] The '123 Patent is attached as Exhibit 1 to the Declaration of Elizabeth J. Brown Fore. All other exhibits referred to herein are also attached to the Fore Declaration.

graduated from the University of Virginia with a Bachelor of Science in Aerospace Engineering and then joined NASA. Mr. Hindman entered the Master in Aerospace Engineering program at the University of Texas at Austin during which time he took numerous courses on navigation and orbital and celestial mechanics.

Building on his work at NASA and the University of Texas, Mr. Hindman began developing a more accurate civilian GPS navigation and guidance system. At the same time, Mr. Hindman surveyed the automobile marketplace and observed that GPS systems for automobiles were dedicated systems that were required to be installed in parallel to existing electronics in a car. He observed that these systems were generally difficult to integrate into a car and did not provide the ability to enable or disable services once the unit was purchased.

Based on this work, Mr. Hindman invented and patented a system for receiving broadcast wireless signals, such as GPS or satellite radio signals, that could be integrated into electronics systems in mobile environments, comprising one or more units to receive data (*e.g.*, GPS or satellite radio data) via a broadcast wireless signal and a computer system connected to the unit(s) through which a user could access the data. Mr. Hindman realized that, because these types of systems received data via a continuously broadcasting wireless signal (*e.g.*, GPS or satellite radio signal), these systems would be especially attractive to thieves because the units would continue to receive the broadcast wireless signals once removed from a car. Thus, without some mechanism for restricting data access, a stolen system would remain fully functional.

To address this problem, Mr. Hindman incorporated the idea of giving each unit a unique identifier (such as a serial number) that is used to restrict access to the data received at the unit. Because this unique identifier is tied to a particular unit, the access restriction can be

implemented on a unit-by-unit basis. Thus, if a unit is stolen, the unique identifier could be used

to prevent a subsequent user from accessing the data received at the unit. The Patents-In-Suit

cover Mr. Hindman's invention.

III. ARGUMENT

This Court is well aware of the developed jurisprudence governing claim construction.

Accordingly, this brief will not detail that jurisprudence, but rather will briefly note some of the

claim construction rules applied herein:

- When construing claims and claim terms, the Court should first look to intrinsic evidence – the claim language, the patent's specification, and if relevant, the patent's prosecution history. *Phillips v. AWH Corp.,* 415 F.3d 1303, 1312 (Fed. Cir. 2005).

- Claim terms should be interpreted in light of the description of the invention as set forth in the specification. *Nystrom v. TREX Co., Inc.*, 424 F.3d 1136, 1142 (Fed. Cir. 2005); *see also, Phillips*, 415 F.3d at 1315 (specification "highly relevant" and, in fact, "[u]sually it is dispositive" as to claim term meaning).

- Limitations in the specification associated with specific embodiments will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994); *see also Phillips*, 415 F.3d at 1323 ("we have repeatedly warned against confining the claims to embodiments"); *SciMed Life Sys. v. Advanced Cardiovascular Sys.*, 242 F.3d 1337, 1340 (Fed. Cir. 2001); *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1344 (Fed. Cir. 2001).

- Claims must be interpreted consistently across all patents that derive from the same parent application and share common terms. *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1293 (Fed. Cir. 2005).

- Claims must be read in the context of the problem the invention was intended to solve. *Flex-Rest, LLC v. Steelcase, Inc.*, 455 F.3d 1351 (Fed. Cir. 2006).

- Where a claim element is recited as a "means" to perform a function, the element must be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof per 35 U.S.C. §112 ¶6. *Odetics Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1266-67 (Fed. Cir. 1999). When construing the function, it is improper to "narrow the claim language." *Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc.*, 296 F.3d 1106, 1113 (Fed. Cir. 2002). Similarly, the Court should not import extraneous

Eight terms from the '123 Patent are presented to the Court for construction. Ten terms

from the '592 Patent, five of which are 35 U.S.C. §112 ¶6 means-plus-function claims, are

presented to the Court for construction. Despite the fact that Defendants had merged prior to the

August 22, 2008 filing of the Parties' Joint Claim Construction and Prehearing Statement (the

"August 22, 2008 Statement"), Defendants filed a Revised Joint Claim Construction and

Prehearing Statement on October 10, 2008. While XM and Sirius had significant differences

between their original constructions, Sirius XM has now adopted the constructions that Sirius

originally proposed and has dropped all of XM's proposed constructions.

A.   UNITED STATES PATENT NO. 7,165,123

1.   "computer system" (Claim 1)

Claim No.	Claim Term, Phrase or Clause	Keystone's Proposed Construction
1	"computer system"	Ordinary Meaning

Keystone proposes the term "computer system" be given its ordinary meaning. *Phillips*,

415 F. 3d at 1312-13 (words of patent "generally given the ordinary and customary meaning").

The term "computer system" is used in a manner consistent with its ordinary meaning throughout

the claims and specification of the '123 Patent. (Ex. 1, '123 Patent, Claims 1, 10, 16, 24, 25, 29,

col. 1, ll 26-30, col. 1, ll 44-48, col. 1, ll 51-53, col. 1, ll 61-63, col. 2, ll 22-23, col. 3, ll 11-13,

col. 4, ll 38-45; col. 5, ll 26-30, col. 7, ll 29-32.)   The inventor did not redefine the term

"computer system" in any of the claims or the specification. As commonly understood, and as

understood by one skilled the art, a "computer system" is a computer (a device with a processor

to execute instructions) and any input and output devices necessary to interface with the computer. [2]

Sirius XM seeks to construe the term "computer system" as:

A *flexible, general purpose personal* computer *capable of running a variety of operating systems and application programs*. (emphasis added)

Sirius XM's proposed construction improperly imports several limitations (italicized above) that have no support in the language of the claims, the specification or the prosecution history.

a.   Sirius XM Attempts to Improperly Import the Limitations "flexible," "general purpose" and "personal"

As to the term "personal," the only time the inventor mentions a "personal" computer in the entire 10-year history of these patents was as an *example* in the *provisional* patent application filed in February 1997.[3]   (Ex. 3 at 2.)   The inventor did not include any discussion of a "personal" computer in the specification of the '123 Patent, nor did he use the term "personal" in any claim, but rather used the term computer system in its broader context throughout.[4]   The term "computer system" should not be restricted to a "personal computer" based on an example from the provisional application. *Phillips*, 415 F.3d at 1323 (stating "we have repeatedly warned against confining the claims to [specific] embodiments").

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[2] If the Court deems construction necessary, Keystone's proposed construction is "a device with a processor to execute instructions." *See* Ex. 13, *Computer Dictionary, 3rd Edition* 111 (1997 Redmond: Microsoft Press) (defining "computer system" as the configuration that includes all functional components of a computer and associated hardware).   By proposing this construction, Keystone does not suggest and does not believe that this Court has any obligation to determine an alternate construction for "computer system." *02 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008).

[3] Tellingly, XM did not use the word "personal" in its proposed construction filed as part of the August 22, 2008 Statement.

[4] Notably, the inventor did not use the term "personal computer" anywhere in the specification when converting the provisional patent application into the utility patent application that led to the '123 Patent.

Neither of the terms "flexible"[5] or "general purpose" are used in the claims, and to the

extent the terms "flexible" and "general purpose" appear in the specification and prosecution

history, those terms are used to describe the overall I/O management system, rather than the

computer system itself (as these examples illustrate):

- "The present invention provides for a unique computer architecture combining radio, CDROM, and capabilities with a flexible I/O management system . . . ." (Ex. 1, '123 Patent, col. 3, ll 13-16.)

- "The present invention embodies an apparatus, system, and method for combining a flexible input/output management system with a new mobile computer architecture." (Ex. 1, '123 Patent col. 3, ll 21-23.)

- "Applicant's invention [discloses] a general mobile computer platform with a flexible input/output management system." (Ex. 4 at 4; Ex. 5 at 5.)

- "[Prior art reference] is not a general purpose computation and input/output management platform as disclosed by the applicant . . . [n]one of these disclosures teach, suggest or imply an architecture based on a flexible, optimized input/output management system . . . ." (Ex. 4 at 7.)

The inventor used the terms "flexible" and "general purpose" to differentiate the inventor's

overall architecture and I/O management system from the prior art, and ***not*** to describe the

computer system itself as a "flexible, general purpose" computer.

        b.   Sirius XM's Proposed Construction is Inconsistent With the Intrinsic Evidence.

None of the claims, specification or the prosecution history requires or states that the

computer system be "capable of running a variety of operating systems and application

programs" as proposed by Sirius XM. In fact, this limitation is entirely unsupported by the

specification. Nothing in the claim language, the specification or the prosecution history

requires the computer system be capable of running multiple operating systems or multiple

software applications. The specification of the '123 Patent includes an embodiment of a

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[5] XM also did not use the word "flexible" in its proposed construction filed as part of the August 22, 2008 Statement.

computer system that has a microprocessor 32 and ASIC 28 that can work together to provide an operating system for operating the computer system. (Ex. 1, '123 Patent, col. 5, ll 26-47.) Similarly, the specification discusses an embodiment of ASIC 28 that can be designed to run specific user applications. (*Id.* at col. 5, ll 37-39.) However, these are merely embodiments. Furthermore, while the computer system may have an operating system, and while it may be able to run specific applications, neither the claim language nor the discussion in the specification require the computer system be capable of running a *variety* of operating systems or a *variety* of software applications. A computer system capable of running a single operating system[6] and/or a single software application is equally covered by the claim language and supported by the intrinsic evidence.

Sirius XM's proposed construction for "computer system" is nothing more than an improper attempt to rewrite the claim language as they wish it had been written. *White v. Dunbar*, 119 U.S. 47, 51 (1886) (a claim is not "like a nose of wax, which may be turned and twisted in any direction, by merely referring to the specification, so as to make it include something more than, or something different from, what its words express."); *see also Phillips*, 415 F.3d at 1323; *Electro Med. Sys. S.A.*, 34 F.3d at 1054 (Fed. Cir. 1994). The specification, claims and prosecution history provide no support for Sirius XM's proposal to import the limitations "flexible," "general purpose," "personal" or "capable of running a variety of operating systems and application program" into the claim to modify computer system.

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[6] The computer system could also simply run instructions at a processor.

2. "processor" (Claim 1)

Claim No.	Claim Term, Phrase or Clause	Keystone's Proposed Construction
1	"processor"	Ordinary Meaning

Keystone proposes the term "processor" be given its ordinary meaning. The term "processor" is used in a manner consistent with its ordinary meaning throughout the claims and specification of the '123 Patent. (Ex. 1, '123 Patent, Claims 1, 16, col. 5, ll 26-30) The inventor did not redefine the term "processor" in any of the claims or specification. As commonly understood, and as understood by one skilled the art, a "processor" is a part of a computer that executes instructions. [7]

Sirius XM seeks to construe the term "processor" as a "device for executing *general purpose personal* computer instructions in the computer system." (emphasis added). As with its definition of "computer system," Sirius XM's proposed construction of "processor" contravenes the plain language of the claim and would require the Court to add the limitations of "general purpose" and "personal" that were not contemplated by the inventor. *See supra* Part III.A.1. Sirius XM's proposed construction fails for the same reasons outlined above. *Id.*

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[7] If the Court deems construction necessary, Keystone's proposed construction is "a part of a computer that executes instructions." *See* Ex. 12, *Communications Standard Dictionary*, 722 (1983 New York: Van Nostrand Reinhold Company Inc.) (defining "processor" as "[I]n *computers* and *communications systems,* a *functional unit* that interprets *instructions* and executes them." (italics in original)) Again, Keystone does not suggest or that this Court has an obligation to provide a construction for the term "processor."

3.   "unit" (Claim 1)

Claim No.	Claim Term, Phrase or Clause	Keystone's Proposed Construction
1	"unit"	"A device or collection of components, separate from the computer system."

Sirius XM seeks to construe the term "unit" as:

a device, separate from the computer system, that is designed to be easily installed and removed from the apparatus in the mobile environment.

Thus, Sirius XM agrees with all aspects of Keystone's construction of "unit" except that Sirius XM: 1) disputes that a "unit" can be a "collection of components" and 2) improperly restricts the term "unit" as "designed to be easily installed and removed from the apparatus in the mobile environment."

> a.   The Intrinsic Evidence Supports Keystone's "Collection of Components" Construction.

Keystone's construction is supported by the specification, which repeatedly refers to a "unit" as not only a device, but also a "collection of components." (Ex. 1, '123 Patent, Fig. 7 and col. 8, l 19 – col. 9, l 54.) Figure 7 shows an embodiment of a unit (item 75) that includes a collection of components, including, among others, microprocessor 82, RAM 84, ROM 83, navigation antenna 4, and oscillators 87. *Id.* Additionally, the "unit" has a variety of actions it can perform (*e.g.*, receiving a wireless signal, processing the signal, communicating with the computer system, etc….), indicating that the unit has a variety of components it uses to accomplish those actions. (Ex. 1, '123 Patent, col. 6, l 38 – col. 7, l 44, col. 8, l 57 – col. 9, l 54.) Thus, Keystone's construction comports with interpreting the claim language in light of the specification.

b.   Sirius XM's Proposed Constructions Improperly Reads
Limitations Into The Claim.

The claims of the '123 Patent use the term "unit" more broadly than the construction

proposed by Sirius XM. Sirius XM seeks to define the term "unit" in the '123 Patent in exactly

the same way it proposes defining the term "line replacement unit" from the '592 Patent; namely,

by including the language "designed to be easily installed and removed from the apparatus in the

mobile environment." However, by not using the language "line replacement" to modify "unit"

in the claims of the '123 Patent, the inventor clearly intended a different meaning. *See NTP,*

Inc., 418 F.3d at 1293 (stating that claims must be interpreted consistently across all patents that

derive from the same parent application and share common terms). Furthermore, Sirius XM's

construction of the term "unit" to have a meaning identical to the term "line replacement unit"

should be rejected because it renders the words "line replacement" meaningless. *Gen. Am.*

Transp. Corp. v. Cryo-Trans, Inc., 93 F.3d 766, 770 (Fed. Cir. 1996) (rejecting the district court's

claim construction because it rendered superfluous the claim requirement for openings adjacent

to the end walls). By interpreting the term "unit" in the '123 Patent more broadly than the term

"line replacement unit" in the '592 Patent, the phrase "line replacement" in the claims of the

'592 Patent is not simply excess verbiage, but properly denotes a specific type of unit.

Sirius XM's attempt to define the term "unit" as a "line replacement unit" also commits

"one of the cardinal sins of patent law," namely, reading limitations into the claims from the

specification. *SciMed Life Sys.*, 242 F.3d at 1340. While the specification of the '123 Patent

teaches that a unit can be, in one embodiment, a line replacement unit, the claims of the '123

Patent do not in any way limit the term "unit" to require the limitation of "line replacement."

See Phillips, 415 F.3d at 1323 ("we have repeatedly warned against confining the claims to

[specific] embodiments"); *Electro Med. Sys.*, 34 F.3d at 1054 (particular embodiment appearing

in specification will not be read into the claims when claim language broader than embodiment).

4. "perform a function in the mobile environment in cooperation with the computer system" (Claim 1)

Claim No.	Claim Term, Phrase or Clause	Keystone's Proposed Construction
1	"perform a function in the mobile environment in cooperation with the computer system"	"converting and processing these signals to provide data to the computer system for Presentation of information to the user"

Sirius XM does not propose a construction for this phrase.

One of the features of the described invention is to present user desired functions to the

user through the use of units. (Ex. 1, '123 Patent, col. 3, ll 32-34.) Units convert and process

wireless signals in order to provide data to the computer system (*e.g.*, the navigation unit

embodiment "includes statistical estimation" processing capabilities (Ex. 1, '123 Patent, col. 3, ll

34-37, col. 9, ll 22-29, col. 9, ll 36-39, Fig. 7: navigation microprocessor 82) and the crash

detection unit embodiment includes "onboard deceleration and verification" capabilities

implemented by a processor (Ex. 1, '123 Patent, col. 11, ll 43-59, Fig. 10a: crash detection

microprocessor 127)). The unit can pass data to the computer system via the data bus so the

computer system can present information (*e.g.*, navigation and route guidance information,

telecommunications information, etc.) to a user. (Ex. 1, '123 Patent, col. 8, ll 59-62; col. 2, ll 4-

10, Fig. 3, col. 3, ll 32-34.) Thus, Keystone's proposed construction is consistent with the claim

language and the specification.

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5. **"unit having a persistent unique hardware identification used to restrict access to data received at the unit via the wireless signal" (Claim 1)**

Claim No.	Claim Term, Phrase or Clause	Keystone's Proposed Construction
1	"unit having a persistent unique hardware identification used to restrict access to data received at the unit via the wireless signal"	"A number, code or other location-independent identifier (such as a serial number) that identifies a specific piece of hardware and does not identify any other piece of hardware of the same type, and once assigned to that specific piece of hardware does not change, and is employed in the process of preventing retrieval of all or part of user requested data from the data that actually arrived at the unit by way of the wireless signal"

In contrast, Sirius XM seeks to construe this phrase as:

A non-volatile number or bit pattern that is unique to a particular unit is provided to the computer system so that the computer system makes a determination whether it will accept data from the unit that was received from a wireless signal

As discussed in the Technical Background, the inventor realized that, in mobile environments where units would continuously receive data via a broadcast wireless signal, it was important to provide a form of protection against unauthorized user access to the received data. To achieve this goal, the '123 Patent claims a persistent unique hardware identification to restrict user access to data received at the unit.

> **a.** Keystone's Persistent Unique Hardware Identification Construction is Consistent With Both The Intrinsic And Extrinsic Evidence.
>
> > **i.** "A Number Code or Other . . . Identifier that Identifies A Specific Piece of Hardware and Does Not Identify Any Other Piece of Hardware Of The Same Type."

The persistent unique hardware identification described in the '123 Patent specification and prosecution history is an identifier, such as a number, code or other identifier, that uniquely

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identifies a specific unit. Therefore, each unit has an identifier that is different from all other units when deployed in the mobile environment. The '123 Patent specification includes examples of hardware identifications that are either numbers or codes that are unique to each unit. (Ex. 1, '123 Patent, col. 7, l 26; col. 7, ll 32-33 (unique HEX code; hardware unit code)). The prosecution history further illustrates that the unique hardware identification "is hardware specific, such as a serial number or other uniquely assigned identification . . . ." and "is an identification number or other identification uniquely assigned to a piece of hardware, such as a serial number, hardware identification number or other identification, to uniquely identify that piece of hardware." (Ex. 6, at 13-14.) Keystone's construction is further supported by the extrinsic evidence of the definition of "unique":

1.   Of which there is only one; one and no other; single, sole, solitary. Ex. 10, *The Oxford English Dictionary, 2nd Ed. Vol. XIX* 73 (1989 New York: Oxford Univ. Press).

These examples from the intrinsic and extrinsic evidence support the proposition that the persistent unique hardware identification is a number, code or other identifier that uniquely identifies a particular unit.

ii.   "Persistent" Unique Hardware Identification "Does Not Change" and is "Location Independent."

The unique hardware identification is "persistent" in that the hardware identifier does not change once assigned to a unit for the purpose of restricting access to data received at the unit as illustrated in the specification, (Ex. 1, '123 Patent, col. 7, ll 29-36 (referencing the use of hardware unit codes for restricting access to data)), and the prosecution history, (s*ee, e.g.*, Ex. 7 at 9 (persistent unique hardware identification is "assigned persistently to the unit [and is] *not* an identification that changes as the unit is connected to or removed from a computer system . . . ." and thus "remains persistent so that the unit can communicate the same unique identification if

the unit is disconnected from a first computer system and is connected to a second computer

system.") (emphasis added). This interpretation that the unique hardware identification does not

change once assigned is further supported by the extrinsic evidence offered in the following

dictionary definitions of "persistent":

> 2.   Existing continuously in time; enduring. Ex. 10, *The Oxford English Dictionary, 2nd Ed. Vol. XI* 596 (1989 New York: Oxford University Press).
>
> 3.   constantly repeated; continued. Ex. 11, *Random House Webster's College Dictionary* 1007 (1991 New York: Random House).

Thus, both the intrinsic and extrinsic evidence support that a unit's persistent unique hardware

identification does not change, and, once assigned, identifies a particular unit even if the unit is

moved from one location to another (*e.g.*, from car to car).

> iii.   "Employed In The Process Of Preventing Retrieval Of All Or Part Of User Requested Data From The Data That Actually Arrived At The Unit By Way Of The Wireless Signal."

The claim language states that the persistent unique hardware identification is used "to

restrict access to data received at the unit via the wireless signal." (Ex. 1, '123 Patent, Claim 1.)

This means that when a user requests data that has actually been received at the unit, the

persistent unique hardware identification is employed in some manner to prevent access to all or

part of the user requested data.

The data to which access will be restricted is "data *received* at the unit." *Id.* (emphasis

added). The plain meaning of the past tense of "received" is that the data has actually been

received by the unit, not that the data has yet to be received. The claim further requires that the

persistent unique hardware identification be used to "restrict access" to such data when that data

is requested by a user. *Id.* This further makes sense in light of the fact that one of the purposes

of the persistent unique hardware identification is theft deterrence. (*See* Ex. 8 at 13; Ex. 1, '123

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Patent, col. 7, ll 29-36 (a hardware unit code and pin configuration "promotes safety and data security for the system as well as providing substantial theft deterrence since the entire system can only be accessed by authorized users")). In these systems, the units can continuously receive data from broadcast wireless signals so that if a unit were stolen it would still operate absent some data access restriction mechanism. Thus, restricting user access to data received at the unit is an aspect of theft deterrence because post-theft, even though data continues to be sent to the unit, the thief's access to the data will be restricted. *Flex-Rest, LLC*, 455 F.3d at 1351 (stating that claims must be read in the context of the problem that the invention was intended to solve). Thus, the persistent unique hardware identification is used to restrict users from accessing data actually received at the unit to prevent access to all the features of the system. (Ex. 8 at 13.)

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b.   Sirius XM's Proposed Construction Improperly Reads
Limitations Into the Claims.

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Sirius XM's proposed construction for "persistent unique hardware identification" once again attempts to improperly import limitations into the claims.

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i.   Sirius XM's "Unique Hardware Identification"
Construction Improperly Imports Limitations.

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Sirius XM proposes the hardware identification be limited to a "number or bit pattern." This interpretation not only attempts to improperly restrict the term "hardware identification" to specific examples listed in the specification, it completely ignores additional examples discussed by the inventor in the specification and prosecution history. (Ex. 1, '123 Patent, col. 7, l 26; col. 7, ll 32-33 (describing a hardware unit *code*); Ex. 6 at 13-14 (hardware identification described as "hardware specific, such as a serial number or *other uniquely assigned identification . . . .*" and "is an identification number *or other identification uniquely assigned to a piece of hardware*, such as a serial number, hardware identification number *or other identification*, to uniquely

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identify that piece of hardware")) (emphasis added). A "code" or "other identification" includes forms of identifiers in addition to "numbers or bit patterns," such as letters, alphanumerics, or other symbols, that can uniquely identify a unit. Sirius XM's construction should once again be rejected for improperly and selectively importing limitations from examples in the specification into the claim language.

<div align="center">ii.   Sirius XM's "Persistent" Construction Too Narrow.</div>

Unlike Keystone's proposed definition of persistent to be location-independent and unchanging once assigned, Sirius XM's interpretation of "persistent" to mean "non-volatile" unduly restricts the claim language and has no support in either the intrinsic or extrinsic evidence. In the field of computing, the phrase "non-volatile" typically references a type of memory.[8] The '123 Patent does not in any way define or limit the type of memory in which the persistent unique hardware identification is stored. In fact, the only use of the term "non-volatile" in the '123 Patent is in reference to a type of memory for flash memory module 31 located *in the computer system* (not in the unit); and there is no mention of storing the persistent unique hardware identification in that memory module. (Ex. 1, col. 5, ll. 51-55.) While the claims include no language that would prevent the unit's persistent unique hardware identification from being stored at the computer system in non-volatile memory, the claim language certainly does not require it.[9] Rather than looking to the claim language, specification, prosecution history, or even appropriate extrinsic evidence to properly define "persistent," Sirius

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[8] Ex. 10, *The Oxford English Dictionary, 2nd Ed. Vol. X* 506 (1989 New York: Oxford University Press) (defining "non-volatile" as "b. Computers. Of a store or storage."); Ex. 13, *Computer Dictionary, 3rd Edition* 332 (1997 Redmond: Microsoft Press) (defining "non volatile memory" as "a storage system that does not lose data when power is removed from it. Intended to refer to core memory, ROM, EPROM, flash memory, bubble memory, or battery-backed CMOS RAM . . . .")

[9] Since non-volatile is only mentioned in the '123 Patent with reference to memory located at the computer system, Sirius XM's requirement that the persistent unit hardware identification be "non-volatile" would require the unusual and impractical result that the *unit's* persistent unique hardware identification would not be stored at the unit itself, but rather would be stored at the computer system.

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XM uses the term "non-volatile" out of context to inappropriately narrow the interpretation of persistent unique hardware identification.

> iii. Sirius XM's Construction of "Used to Restrict Access to Data Received at the Unit" Improperly Imports Limitations

Sirius XM proposes that using the persistent unique hardware identification to "restrict access" requires that the persistent unique hardware identification be "provided to the computer system so that the computer system makes a determination whether it will accept data from the unit . . . ." The primary dispute between the parties regarding this claim term centers on Sirius XM's assertion that the *computer system* makes the determination as to whether it will accept data from the unit. Although the claim certainly encompasses such embodiments, there is simply no requirement in the claims (or anywhere else) that the computer system (as opposed to the unit) make the determination as to whether data can be accessed.

The claim language provides no support for Sirius XM's proposed construction. As an initial matter, the term "computer system" is not even included in the claim limitation at issue. Additionally, the claim states that the persistent unique hardware identification is used to "restrict access to data at the unit," not that it is used by the computer system to determine if the computer system will "accept data from the unit." Finally, there is no language in the claim requiring the "computer system" to be responsible for "*making a determination* as to whether it will accept data from the unit." (emphasis added). Thus, while the computer system *could* be responsible for making a determination as to whether it will accept data, the claim language does not require the computer system to do so. Likewise, the claim language in no way prevents the *unit* from making the determination (or even a combination of both the unit and the computer system making the determination) as to whether access is granted (though Sirius XM's interpretation would prevent this). (Ex. 1, '123 Patent, col. 7, ll 22-36 (". . . the *entire system* can

only be accessed by authorized users" (emphasis added)).   The term "used to restrict access to data received at the unit" in the '123 Patent simply does not *require* the computer system to make a determination as to whether the computer system will accept data received at the unit.

6.   "a data bus coupled to the computer system and the unit for transferring unit data information" (Claim 1)

Claim No.	Claim Term, Phrase or Clause	Keystone's Proposed Construction
1	"a data bus coupled to the computer system and the unit for transferring unit data information"	"One or more wires or electrical connections between the computer system and the unit for transferring data from the unit"

Sirius XM seeks to construe "a data bus coupled to the computer system and the unit for transferring unit data information" as:

A common communications pathway connecting multiple devices that allows for the transfer of address, control and data information between the devices.

The parties agree that the data bus is a connection that allows data to be transferred between the unit and the computer system. The central disagreement between the parties is that Sirius XM's proposed construction would necessarily require the data bus to transfer address, control *and* data information.[10] Keystone agrees that the data bus must transfer data information, but there is no requirement that it be able to transfer address and control information.

a.   Keystone's Construction is Consistent With the Intrinsic and Extrinsic Evidence.

The plain claim language of the '123 Patent specifically defines the type of information transferred over the "data bus" as "*data* information" with no mention of address or control information. (Ex. 1, '123 Patent, Claim 1 (emphasis added)). Furthermore, Figure 5 of the '123 Patent describes that an I/O data bus 51 connects the I/O processor 35 (a portion of one

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[10] Keystone notes, however, that Keystone does not know what Sirius XM means by the phrase "a common communications pathway connecting multiple devices." Instead of clarifying the phrase being construed, by using this language, Sirius XM has offered a new phrase in need of construction.

embodiment of a computer system) with external and internal units where the data bus 51 is described as specifically transferring *data* between the computer system and the unit. (Ex. 1, '123 Patent, col. 8, ll 59-62.) A number of electrical connection structures are illustrated for achieving this data transfer including serial and parallel ports, ISA, EISA, PCI, VME busses, PCMCIA card slots or other types of standard busses or specifically designed proprietary bus structures. (Ex. 1, '123 Patent, col. 6, ll 46-51.)

<div align="center">

b.   Sirius XM's Proposed Construction Violates Several
Claim Construction Tenants.

</div>

Sirius XM once again ignores the plain language of the claims, attempts to improperly import a limitation based on an example in the specification and impermissibly adds limitations from the claims of the '592 Patent into the claims of the '123 Patent.

The plain claim language of the '123 Patent specifically defines the type of information transferred over the "data bus" as "*data* information." (Ex. 1, '123 Patent, Claim 1 (emphasis added)). There is simply no mention in the claims of the '123 Patent of "address" or "control" information being transferred over the data bus.

While the specification of the '123 Patent describes one embodiment of a data bus structure that can transfer a combination of address, control and data information, there is nothing in the specification that limits the transfer of information over the data bus to this particular embodiment. In fact, the specification includes another example that only describes where *data* is being transferred across the data bus. (Ex. 1, '123 Patent, col. 8, ll 59-62.) Sirius XM has improperly read limitations from a particular example in the specification into the claims. *See Phillips*, 415 F.3d at 1323; *Electro Med. Sys. S.A.*, 34 F.3d at 1054 (particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments).

<div align="center">19</div>

Finally, Sirius XM attempts to add the limitations associated with "a data bus means" from the claims of the '592 Patent into the "data bus" limitation of the '123 Patent claims despite the clear difference in claim language between the two patents. Claim 1 of the '592 Patent recites "a data bus means . . . for transferring *a combination of address, control and data information*." (Ex. 2, '592 Patent, Claim 1 (emphasis added).) The '123 Patent, in contrast, recites "a data bus" for transferring "unit data information" but does not require the transfer of address and control information. (Ex. 1, '123 Patent, Claim 1.) By removing the "combination of address, control" language from the claims of the '123 Patent, the inventor clearly contemplated a different meaning for the two terms between the '592 Patent and '123 Patent. *NTP, Inc.*, 418 F.3d at 1293. Thus, the term "data bus" should not be constrained to require transferring "address" and "control" information because that would require the claim language of the two patents to be interpreted identically even though the plain language between these claims is quite different.

7.   "discrete information" (Claim 1)

Claim No.	Claim Term, Phrase or Clause	Keystone's Proposed Construction
1	"discrete information"	"Information that in and of itself has a defined meaning"

Sirius XM seeks to construe "discrete information" as:

Data representing physical states having a limited number of distinct values.

Keystone's proposed construction is supported by the specification and prosecution history of the '123 Patent in which the type of information passed on the discrete line (*i.e.*, discrete information) is consistently described as information that, in and of itself, has a defined meaning.

Throughout the '123 Patent, discrete lines are described as running in parallel to the data bus to pass discrete information. (Ex. 1, '123 Patent, col. 6, ll 62-64; col. 8, ll 62-64.) The specification teaches that a discrete line provides an additional connection that allows certain information to be passed between the computer system and the unit without requiring the use of the data bus. *Id*. The discrete line and information and signals carried over discrete lines were also discussed several times during the prosecution of the '123 Patent. The inventor distinguished a discrete line from a data bus, stating that "a discrete line is a signal line for which a signal has a specified meaning to the recipient. For example, when a signal is asserted on the discrete line it can mean, for example, that an error has occurred, [or] a particular condition exists." (Ex. 6 at 11.) This was contrasted with a data bus in which "the meaning of signals on the bus is not specified so that various data can be sent on the data bus." *See id*. Both the specification and prosecution history support discrete information being information that, in and of itself, has a specified meaning.

Sirius XM once again attempts to improperly import limitations into the claim language, in this instance attempting to limit discrete information to specific examples of discrete information described in the prosecution history. However, the examples in the prosecution history of discrete information relating to "physical states" were merely provided to the Examiner as examples. (Ex. 7 at 9.) While certainly a physical state such as "the car is moving" is an example of discrete information, the inventor never stated in the prosecution history that discrete information was limited to representing physical states having a limited number of distinct values. *Id.*

8.   "restrict unit functions to authorized users" (Claim 2)

Claim No.	Claim Term, Phrase or Clause	Keystone's Proposed Construction
2	"restrict unit functions to authorized users"	"Prevent the unit from performing one or more actions for unauthorized users."

Sirius XM seeks to construe "restrict unit functions to authorized users" as:

The persistent unique hardware identification is used to prevent unauthorized users from accessing, controlling, operating, or programming the unit.

Units, such as navigation units, are capable of performing multiple actions. (*See* Ex. 1, '123 Patent, col. 1, ll 67-col. 2, ll 2 (discussing previous systems that provided navigation only or navigation and route guidance)). The persistent unique hardware identification can be used to prevent access to certain data from the unit so that unauthorized users cannot access the full functionality of the apparatus. (Ex. 1, '123 Patent, col. 7, ll 33-36.)

In contrast, Sirius XM seeks to improperly narrow the claim limitation by proposing that "restrict unit functions to authorized users" require preventing users from "accessing, controlling, operating or programming" the unit. There is no support for this limiting definition in the intrinsic evidence.

B.   UNITED STATES PATENT NO. 6,324,592

1.   "computer system" (Claim 1)

Claim No.	Claim Term, Phrase or Clause	Keystone's Proposed Construction
1	"computer system"	Ordinary Meaning

Both Keystone and Sirius XM believe that the term "computer system" should be construed consistently between the '592 Patent and the '123 Patent. *See supra* Part III.A.1.

2.   "line replacement unit (LRU)" (Claim 1)

Claim No.	Claim Term, Phrase or Clause	Keystone's Proposed Construction
1	"line replacement unit (LRU)"	"A device or collection of components, separate from those in the computer system, that is designed to be easily installed and removed from the apparatus in the mobile environment"

Sirius XM seeks to construe the phrase "line replacement unit" as:

A device, separate from those in the computer system, that is designed to be easily installed and removed from the apparatus in the mobile environment.

Keystone and Sirius XM agree on all aspects of the proper construction for "line replacement unit" except Sirius XM disputes that a line replacement unit can be a "collection of components." This is the same dispute discussed previously in conjunction with the '123 Patent. *See supra* Part III.A.3.

3.   "wherein each of the line replacement units performs a dedicated function in the mobile environment in cooperation with the processing means of the computer system" (Claim 1)

Claim No.	Claim Term, Phrase or Clause	Keystone's Proposed Construction
1	"wherein each of the line replacement units performs a dedicated function in the mobile environment in cooperation with the processing means of the computer system"	"Each of the line replacement units processes data to provide particular data to the computer system for presentation of information to the user"

Sirius XM does not propose a construction for this phrase. The arguments supporting Keystone's interpretation over Sirius XM's lack of interpretation were discussed previously in conjunction with the '123 Patent. *See supra* Part III.A.4.

4. **"the I/O processing means is required to recognize a unique address in order to communicate with the one or more line replacement units" (Claim 1)**

Claim No.	Claim Term, Phrase or Clause	Keystone's Proposed Construction
1	"the I/O processing means is required to recognize a unique address in order to communicate with the one or more line replacement units"	"To determine by any mechanism a characteristic or individuality of a designation or combination of designations associated with a specific piece of hardware that provide a location and/or identity of that piece of hardware where such location and/or identity is not associated with any other piece of hardware of the same type, in order to allow the transfer of additional data to and from the one or more line replacement units"

Sirius XM has proposed the following construction:

The computer system's I/O processor must recognize a particular number or bit patterns of a particular line replacement unit on the data bus in order to establish communication between the computer system and the particular line replacement unit.

   a. The Unique Address is Used to Allow the Transfer of Additional Data From the One Or More Line Replacement Units, Not Prevent all Communications.

One of the disagreements between the parties in construing the phrase "wherein the I/O processing means is required to recognize a unique address in order to communicate with the one or more line replacement units" concerns the portion "in order to communicate with the one or more line replacement units." Keystone proposes this phrase means that the "recognition" of a line replacement unit's unique address is required to allow full transfer of data between the line replacement unit and the computer system. Sirius XM, on the other hand, wishes to construe the claim limitation so that "recognition" of a line replacement unit's unique address must be done "in order to *establish* communication between the computer system and the particular line replacement unit." This interpretation, however, does not make sense.

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The claims of the '592 Patent provide that the computer system must "recognize" a unique address from the line replacement unit. As a result, at least some information must be sent over the data bus from the line replacement unit to the computer system; namely, the unique address of the line replacement unit (otherwise the computer system could not determine whether or not the line replacement unit has the proper unique address signature). (Ex. 2, '592 Patent, col. 7, ll 25-28.)   Therefore, the line replacement unit and the computer system are communicating (i.e., sending/receiving data) at least to the extent that the computer system is receiving the line replacement unit's unique address. Thus, the recognition does not occur before *any* communication occurs. Because the unique address is used to allow further communication between the computer system and the line replacement unit after the unique address is recognized, "in order to communicate with the one or more line replacement units" should be construed in light of the fact that some data is necessarily passed between the unit and the computer system whether or not full communication is allowed.

      b.   The Unique Address is a Designation or Combination of Designations that Provide a Location or Identity of a Piece of Hardware.

As discussed in the Technical Background of the '592 Patent, each unit can be assigned a unique characteristic that can prevent data from being accessed. (*See* '592 Patent, col. 7, ll 20-28.) In the case of the '592 Patent, this characteristic is recited in the claims as a "unique address." In one embodiment, this unique address can be a designation of location (such as a HEX address), identity (such as a hardware unit code) or a combination of location and identity (such as a HEX word and a discrete line state) for a specific piece of hardware. (Ex. 2, '592 Patent, Fig. 5 and col. 7, ll 20-29).   In the example shown in Figure 5, the unique address includes a unique combination of HEX word and discrete line states. (Ex. 2, '592 Patent, Fig. 5).

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The construction that the address can denote identity is further supported by the prosecution history of the '123 Patent that stated that a "unique address . . . refers to a unique identifier that identifies the particular unit." (Ex. 6 at 13.)

>   c.   The Unique Address is Associated With a Specific Piece of Hardware and Is Not Associated with Other Pieces of Hardware of the Same Hardware Type.

The unique address is associated with a specific piece of hardware and not associated with other pieces of hardware of the same hardware type. As discussed above in conjunction with the '123 Patent (*see supra* Part III.A.5.a.i.), the term "unique" is used to describe characteristics that are not shared by other pieces of hardware of the same type, such as hardware identification numbers.

>   d.   "Recognize" Means to Determine By Any Mechanism a Characteristic or Individuality of a Unique Address

Neither the claims nor the specification of the '592 Patent require a particular method of analyzing the unique address in order to "recognize" it, but states that "if the proper address signature is not provided . . . data access can be restricted." (Ex. 2, '592 Patent, col. 7, ll 25-28.) "To recognize" simply means that the I/O processing means determines some characteristic of or the individuality of a unique address. This interpretation is further supported by the extrinsic evidence definitions of "recognize":

> Recognize: To know by means of some distinctive feature; to identify from knowledge of appearance or character. Ex. 10, *The Oxford English Dictionary, 2nd Ed. Vol. XIII* 343 (1989 New York: Oxford University Press).

> Recognition: the determination by any means of the character or individuality of persons; of objects, such as aircraft, ships, or tanks; or of phenomena such as electromagnetic wave patterns and signals. Ex. 12, *Communications Standard Dictionary* 780 (1983 New York: Van Nostrand Reinhold Company Inc.).

Keystone's construction is consistent with the intrinsic and extrinsic evidence, and therefore, should be adopted. [11]

5. "I/O processing means uses the data bus means in conjunction with the discrete line means to address said one or more line replacement units" (Claim 1)

Claim No.	Claim Term, Phrase or Clause	Keystone's Proposed Construction
1	"I/O processing means uses the data bus means in conjunction with the discrete line means to address said one or more line replacement units"	"To send data/information to the one or more line replacement units over the data bus means and the discrete line means."

Sirius XM seeks to construe this phrase to mean that:

the computer system's I/O processor uses data from the both the data bus and the discrete line(s) to form the address (*i.e.*, the number or bit pattern that is particular to a particular line replacement unit on the data bus) that it uses to communicate with and exchange data with the line replacement units.

As discussed above, Sirius XM's proposed construction of "unique address" is "a particular number or bit pattern of a particular line replacement unit on the data bus."[12]   By Sirius XM's use of its construction for unique address as a part of its construction for this phrase, Sirius XM is improperly attempting to require that the computer system use the data bus and the discrete line(s) to *form* the unique address from data on the data bus and data on the discrete line, and then use that formed address to communicate with and exchange data with the line replacement units. This is an unsupported attempt to define the term "to address" by improperly importing the limitation of "forming" the unique address and by using the definition of the term "unique address."   Neither the claim language nor the prosecution history support this construction.

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[11] Sirius XM does not define "recognize" but simply repeats the word in its proposed construction.

[12] This construction of "unique address" is part of Sirius XM's proposed construction for the phrase "wherein the I/O processing means is required to recognize a unique address in order to communicate with the one or more line replacement units." *See supra* Part III.B.4.

In contrast, Keystone urges a definition of "to address" to mean "communicate with." As

an initial matter, with respect to the plain claim language itself, if the inventor had meant "to

address" to incorporate the meaning of "unique address," he would have included the word

"unique" which he did not.   The claims simply do not require that the unique address be

communicated or formed using data from the discrete line and the data bus.   Rather, as the

specification and prosecution history make clear, the inventor intended to claim that the I/O

processing means of the computer system can communicate with units over both the data bus and

the discrete line. (Ex. 2, '592 Patent, col. 8, ll 53-60, col. 11, ll 9-16; Ex. 5 at 3, 7 (stating

"[n]one of [the cited] disclosures teach, suggest or imply the combination of a data bus network

and discrete lines to optimize input/output management" and "[n]one of these disclosures teach,

suggest, or imply the combined use of data transmitted by a data bus with data transmitted by

discrete lines"). The '592 Patent does disclose in one embodiment that the unique address can be

a combination of addresses, but the discussion of that embodiment makes no mention of how the

address is formed. (Ex. 2, col. 7, ll 18-32.)   Thus, in the claim language, the phrase "to address"

is properly constructed to mean "to communicate with" as proposed by Keystone.

C.   Construction of Means Plus Function Claims in the '592 Patent

The parties agree that the following five elements of claims 1 and 3 are means-plus-

function elements. The parties disagree on the function, the construction of the function, and/or

the structure that corresponds to these elements.

1.   "processing means" (Claim 1)

a.   The Function is Performing the Central Processing of the Computer System.

Keystone contends that the term "processing means" should be construed to have the

function of performing the central processing of the computer system. (Ex. 2, '592 Patent, col. 5,

ll 22-26.) Sirius XM, on the other hand, proposes that the function of the "processing means" is

"executing *general purpose personal* computer instructions in the computer system." (emphasis

added). Sirius XM is incorrect for the same reasons as described in Part III.A.1.

<div align="center">b.   The Corresponding Structure.</div>

The corresponding structure linked to the claimed function is a microprocessor, a single

chip or chipset, or a portion of a larger chip or board that performs multiple functions on the chip

or board. (Ex. 2, '592 Patent, col. 5, ll 22-26; col. 6, ll 26-30; Fig. 4, microprocessor 32.) This

claim element should be construed to cover the identified corresponding structure which

performs the stated function and equivalents thereof.

<div align="center">**2.   "I/O processing means" (Claim 1)**</div>

<div align="center">a.   The Functions are Explicitly Recited in Claim 1.</div>

Although not immediately following the recitation of I/O processing means, the functions of the

I/O processing means are explicitly set forth in Claim 1. The I/O processing means performs the

functions of "[recognizing] a unique address in order to communicate with the one or more line

replacement units" and "[using] the data bus means in conjunction with the discrete line means to

address said one or more line replacement units."   Support for Keystone's proposed interpretation of

these functions is discussed in Parts III.B.4. and III.B.5 *supra*.

Sirius XM proposes that performing the function of I/O processing includes "executing

special purpose instructions that establish and/or run an input/output protocol in the computer

system."   Sirius XM attempts to narrow the scope of the function beyond the claim language

rather than staying true to the expressly recited claim language. *Cardiac Pacemakers, Inc.*, 296

F.3d. at 1113; *Omega Eng'g, Inc. v. Raytek Corp.,* 334 F.3d 1314, 1322 (Fed. Cir. 2003).   Sirius

XM is once again attempting to impermissibly add new limitations that are not recited.

<div align="center">29</div>

b.   The Corresponding Structure.

The structure corresponding to the recited functions is a portion of a computer system, such as an I/O processor, that may be implemented as a single chip or chipset, or be incorporated into a larger chip or board as one of multiple portions on the chip or board. (Ex. 2, '592 Patent; Fig. 4: I/O Processor 35; col. 8, ll 8-12.) The I/O processor communicates with line replacement units through a data bus and discrete line. (Ex. 2, '592 Patent, col. 6, ll 9-14; col. 6, ll 26-30; col. 6, ll 48-51; col. 7, ll 34-39.)   This claim element should be construed to cover the identified corresponding structure(s) which perform the stated function and equivalents thereof.

3.   "data bus means . . . for transferring a combination of address, control, and data information" (Claim 1)

a.   The Function is Clear From the Claim Language.

The primary issue for clarification is whether the data bus means transferring a "combination of address, control and data information" requires that all three types of information be sent together simultaneously as proposed by Sirius XM, or, rather, that data be sent across the data bus means in accordance with the address and control information associated with that data as proposed by Keystone.

Both the intrinsic and extrinsic evidence support that the address and control information are used by the computer system to properly route data. Figure 5 of the '592 Patent shows an I/O data bus 51 used to transport data from internal and external line replacement units to the I/O processor of the computer system. (Ex. 2, '592 Patent, Fig. 5, col. 6, ll 51-53, col. 8, ll 55-58 and col. 11, ll 11-14.) In the preferred embodiment, bus 51 is a combination of an address, control and bus structure consisting of but not limited to an eight bit, sixteen bit, thirty-two bit or sixty-four bit architecture. (Ex. 1, '592 Patent, col. 6, ll 53-57.) This comports with the extrinsic

evidence that demonstrates that it is common in such structures for address and control information to be carried independently from the data information.

> "bus": A set of hardware lines (conductors) used for data transfer among the components of a computer system. A bus is essentially a shared highway that connects different parts of the system–including the microprocessor, disk-drive controller, memory, and input/output ports–and enables them to transfer information. The bus consists of specialized groups of lines that carry different types of information. One group of lines carries data; another carries memory addresses (locations) where data items are to be found; yet another carries control signals. Ex. 13, *Computer Dictionary, 3rd Edition,* 68 (1997 Redmond: Microsoft Press).

The control information can be used to control components of the system to ensure that tasks are carried out in an orderly fashion, while the address information can specify locations to which data can be transferred (as supported by the following extrinsic evidence definitions of "control" and "address"):

> "control" 1: Management of a computer and its processing abilities so as to maintain order as tasks and activities are carried out. Control applies to measures designed to ensure error-free actions carried out at the right time and in the right order relative to other data-handling or hardware-based activities. In reference to hardware, control of system operations can reside in a data pathway called a control bus. Ex. 13, *Computer Dictionary, 3rd Edition*, 116 (1997 Redmond: Microsoft Press).

> "address" 1. In *communications systems*, the *coded* representation of the destination of a *message*. 2. In *data processing*, a *character* or group of characters that identifies a *register*, a particular part of storage, or some other *data source* or *data sink*. 3. To refer to a device or an item of *data*. 4. The part of a *selection signal* that indicates the destination of a *call*. 5. An expression, usually numerical, that identifies a location. Ex. 12, *Communications Standard Dictionary,* 15 (1983 New York: Van Nostrand Reinhold Company Inc.).

The control and address information can, thus, be sent independently of the data information to ensure correct communication and does not have to be sent at the same time as the data information or on identically the same lines as the data information. Therefore, "sending data across the data bus means in accordance with the address and control information associated with

that data" is an appropriate construction of "transferring a combination of address, control, and data information."

>   b.   The Corresponding Structure.

A number of bus embodiments are specified including, but not limited to, serial and parallel ports, ISA, EISA, PCI, VME busses, PCMCIA card slots or other types of standard busses or specifically designed proprietary bus structures. (Ex. 2, '592 Patent, col. 6, ll 42-47.) Each of these embodiments provides electrical connections for the I/O processing means and a line replacement unit that allow for the transfer of address, control and data information. (Ex. 2, '592 Patent, col. 6, ll 51-57; col. 8, ll 55-58; col. 11, ll 11-14.)   Therefore, the corresponding structure for the function of "transferring a combination of address, control and data information" is one or more electrical connections (*e.g.*, bus 51) connected between the I/O processing means of the computer system and the line replacement unit transferring address, control and data information. This claim element should be construed to cover the identified corresponding structures that perform the stated function and equivalents thereof.

>   4.   **"discrete line means . . . for transferring discrete information"**
>   **(Claim 1)**

>   a.   The Function is Transferring Discrete Information.

Keystone and Sirius XM agree that the function of the discrete line is to transfer discrete information. Both Keystone and Sirius XM agree that the function of the discrete line should at least include "transferring discrete information." This function is explicit in the claim and does not require additional limitations. The primary disagreement is the construction of "discrete information," which is discussed in Part III.A.7. Both Keystone and Sirius XM, however, provide consistent definitions of "discrete information" for the '592 Patent and the '123 Patent.

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b.   The Corresponding Structure.

The corresponding structure for performing the function of transferring discrete information is an electrical connection (*e.g.*, discrete line 52) connected between the I/O processor of the computer system and the unit for transferring discrete information. (Ex. 2, '592 Patent, col. 6, ll 57-60; col. 8, ll 58-60; col. 11, ll 14-16.)   This claim element should be construed to cover the identified corresponding structure(s) which perform the stated function and equivalents thereof.

5.   "means for user applications" (Claim 3)

a.   The Function is Processing Audio, Visual or Multimedia
Applications.

The claim language states that the user applications are "audio, visual or multimedia" applications. (Ex. 2, '592 Patent, Claim 3.) The specification describes audio components and display components that can be used individually to provide audio information or visual information, or together for multimedia information. (Ex. 2, '592 Patent, col. 4, ll 18-22, col. 5, ll. 3-19 (describing AM/FM radio and CD-ROM components for audio applications); col. 4, ll 22-23, col. 4, ll 37-41 (describing various displays to output visual applications)). In either case, processors would provide processing of user applications, such as the claimed audio, visual or multimedia applications.

b.   The Corresponding Structure.

The structure for processing the audio, visual or multimedia applications is microprocessor 32 or ASIC 28, working alone or together. (Ex. 2, '592 Patent, col. 5, ll 22-25; col. 5, ll 33-38.) "These two components together, or in separate modes, will provide the mobile user with an operating system by which the user can operate the computer apparatus." (Ex. 2, '592 Patent, col. 5, ll 35-38.) The microprocessor 32 and/or ASIC 28 can be implemented as a

single chip or chipset, or be incorporated into a larger chip or board. (Ex. 2, '592 Patent, col. 6, ll 26-30.)   This claim element should be construed to cover the identified corresponding structure(s) which perform the stated function and equivalents thereof.

IV. CONCLUSION

For the foregoing reasons, Keystone respectfully requests that the Court construe the asserted claim terms in accordance with Keystone's constructions discussed herein.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that the all counsel of record, who are deemed to have consented to electronic service are being served this 10th day of October, 2008, with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3). Any other counsel of record will be served by electronic mail, facsimile transmission and/or first class mail on this same date.

/s/ Charles Ainsworth
Charles Ainsworth